

ORION

CREW EXPLORATION VEHICLE

WEEKLY ACCOMPLISHMENTS



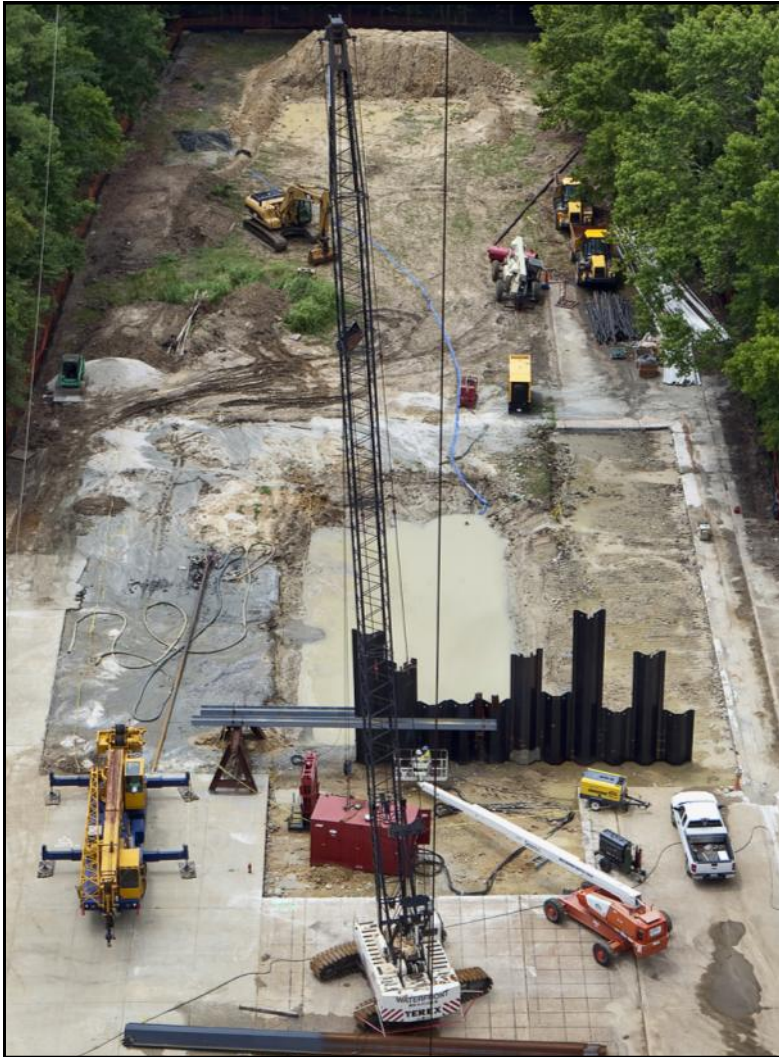
08.06.10



The Sensor Test for Orion ReINav Risk Mitigation (STORM) hardware left Ball Aerospace & Technologies Corporation in Boulder, Colorado in route to Kennedy Space Center. On arrival, the STORM hardware will undergo post-shipping tests before installation into Space Shuttle Endeavour next week. Following installation, tests will verify the STORM hardware is successfully connected to the Shuttle systems. STORM hardware is onboard STS-134 and scheduled to launch in February, 2011.



The Orion team successfully completed the first test of the Crew Module lifting/lowering structure in the Operations and Checkout Facility at Kennedy Space Center as part of their pathfinder risk reduction operations using a full-scale Orion mockup. This is the facility's first major tooling station that will be used for on-site manufacturing and assembly of the spacecraft just prior to launch – a first for NASA and human spaceflight technology. The tooling station design improves worker safety by providing crew module support so that work is not conducted under suspended loads. This tooling station is “portable” and will be moved to Orion facilities across the country to support on-site manufacturing, assembly and integration work, which is much less expensive than producing multiple tooling stations.



A dewatering system, used to lower the groundwater table for a deep, large construction site was installed at the Hydro Impact Basin (shown left) at Langley Research Center. A total of 40 well points will be installed around the basin's perimeter. The Hydro Impact Basin will be critical in assuring there is a capability for a crew module drop test program that ensures vehicle integrity and crew safety & survivability during landing.

Fifty Science, Technology, Engineering and Math (STEM) teachers (shown below) from the Charles County (Maryland) Public Schools visited the Washington Operations Global Vision Center for tours of the Space Experience Center and a briefing from retired astronaut and Lockheed Martin Space Systems Company Vice-President for NASA Program Integration, Ken Reightler. The K-12 teachers were participants in the Space Foundation's Space Discovery Institute, a graduate-credit week-long course. The Space Experience Center has had approximately 800 visitors since opening in late March.

